

**CITY OF CARLSBAD  
CLASS SPECIFICATION**

**JOB TITLE:**                      **GIS TECHNICIAN**

**DEPARTMENT:**                **VARIOUS**

**BASIC FUNCTION:**

Under general supervision, to provide technical support in the maintenance, development and operation of departmental geographic information systems; to assist in assembling and evaluating technical information specific to departmental information; to create, maintain and conduct analyses on a variety of spatial and tabular databases; and to perform related responsibilities as required.

**KEY RESPONSIBILITIES:**

Perform technical duties in the maintenance, development and operation of geographic information systems.

Create, maintain and edit departmental spatial databases, including the preparation of data dictionaries and documentation.

Prepare and execute queries of individual electronic databases and thematic maps, producing products that include, but are not limited to maps, tables, plots, charts and graphs.

Using GIS and other technologies, prepare a variety of analyses of electronic information, including the preparation of multi-layered and linked thematic maps and tabular data; prepare graphic materials showing the results of these analyses; and assist staff in interpreting the results.

Ensure the quality and accuracy of a variety of geographic information system data, including researching and revising maps and data from other data systems.

Operate a variety of geographic information system input and output devices, including digitizing boards, scanners, printers and plotters.

Perform related graphical support as needed.

Perform other related work as assigned.

**QUALIFICATIONS:**

To perform a job in this classification, an individual must be able to perform the essential duties as generally described in the specification. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties in a specific job. The requirements listed below are representative of the knowledge, skill and/or ability required.

**Knowledge of:**

Basic understanding of principles and methodologies associated with GIS technology.

Basic database management principles and techniques using common software packages.

Technologies used in recording and conducting analyses of land use, planning and Geographic information, including cartography and the basic symbols and terminology used in mapping;

Modern office practices, procedures, equipment, and supplies

Digitizing and data manipulation procedures for GIS

**Ability to:**

Communicate clearly and concisely, orally and in writing.

Organize, edit, process and analyze complex data sets and information.

Manage databases, edit/update records, and prepare basic queries of planning and geographic information, and property record systems.

Prepare routine analyses using geographic information system software, such as Arc Info or ArcView.

Prepare, read and interpret maps and data.

Establish and maintain effective working relationships with those contacted in the course of work.

**EXPERIENCE AND EDUCATION:**

Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

Possession of an Associate's Degree or equivalent coursework at a technical or vocational school, in GIS, Cartography, Geography, Civil Engineering, or Computer Science; and

Two years experience working with GIS or related field, including experience using ArcInfo or ArcView.

**PHYSICAL/MENTAL DEMANDS AND ENVIRONMENTAL SETTING:**

While performing the duties of this class, an employee is regularly required to sit; talk or hear, in person and by telephone; use hands to finger, handle, feel or operate standard office equipment; and reach with hands and arms. An employee is frequently required to walk and stand. Specific vision abilities required by this job include close vision and the ability to adjust focus to read and operate office equipment as necessary during the course of the work assignments.

While performing the duties, employees of this class are regularly required to use written and oral communication skills; read and interpret financial and statistical data, information and documents; analyze and solve problems; use math and apply mathematical reasoning and abstract statistical concepts; observe and interpret people and situations; learn and apply new information or skills; perform highly detailed work on multiple, concurrent tasks; work under intensive deadlines; and interact with staff, Council members and others encountered in the course of work.

The employee works under typical office conditions and the noise level is usually quiet. Employees may be required to travel to work sites or other sites for meetings.

DATE APPROVED: April 15, 2002

**General Employee**

**Salary Schedule**

**General Employees Salary Ranges**

**Benefits**

**City of Carlsbad General Employee Benefits**